

# SHOTLINES



DEEP SEA World has just confirmed that its female Angel shark - on loan from Underwater World, Hastings - is pregnant. This is a first for this species in a captive environment and represents an important step in the understanding of this increasingly rare shark species found within European waters.

The Angel Shark Breeding Project is a collaboration between Deep Sea World, Fife and UnderWater World, Hastings and involves the only captive mature Angel sharks in the UK. The project started in 2002 when Deep Sea World transported one of their two male sharks to Hastings, who at the time held the female. In 2004, after no reported successful mating the female was transported up to Deep Sea World where she was introduced to the second male within the large shark tank.

Since then staff at Deep Sea World have recorded both mating and breeding behaviour. Suspicions that the female may be pregnant started in early April when she visibly changed shape underneath and at that point it was investigated whether it was in fact possible to scan a shark for pregnancy.

Deep Sea World's vet brought along portable ultrasound equipment and the shark was removed for investigation and after some experimentation with the equipment a baby Angel shark was captured on film moving within the female.

Initial estimates put the age of the babies at around four months, Angel shark babies are born after almost 12 months and are around 20-30cm at birth - they have been known to give birth to between 9 - 20 young.

Whilst the aquarium of the Bay, San Francisco has successfully bred a different species of Angel shark, Deep Sea World believes that this is the first reported successful mating of this species certainly in the UK, if not in Europe.

# Shark Baby Boom At Deep Sea World



*An Endangered Angel Shark*

The World Conservation Unions (IUCN) Red List of Threatened Species first described this shark species as 'vulnerable' in 2000 and in 2006 this was further upgraded to 'critically endangered'. At the same time this species was also declared extinct in the North Sea.

These sharks are highly vulnerable to being caught as a by-catch through bottom trawls, set nets and bottom long lines. Angel sharks historically have also been used, both fresh and dried salted, for human consumption, and in the production of oil and fishmeal.

Angel sharks grow very slowly and mature only at a large size. The result is that very few angel sharks reach maturity and breed

resulting in an ever declining population.

The Angel shark (*squatina squatina*) is a flat shark species that can be found around the UK and Mediterranean. It is a temperate water bottom dwelling species found on the sea bed at depths of up to 150m and prefers muddy or sandy bottoms where it lies buried with only its eyes protruding. They can grow to almost 2m in length.

The Angel shark is an ambush predator and will lie in wait for unsuspecting prey to venture close enough before being attacked. The Angel shark feeds mainly upon fish, crustaceans and molluscs.

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# Dive in Across The UK



Snake pipefish at Eyemouth  
Image courtesy of Calum Duncan



An unusual white sea fan heavily fouled after disease (Lundy)  
Image courtesy of Sally Sharrock

ACROSS THE length and breadth of the UK, Seasearch volunteers gathered for a national DIVE IN over the weekend of June 9-10 to highlight the need for marine conservation on our shores and seas. For the most part, diving conditions were excellent and it provided an opportunity for the volunteers to visit new sites, learn new skills and record new things.

One target was for volunteers to visit places for which there were no previous records. Successful dives were carried out at new sites in Cardigan Bay, where the divers were looking at areas frequented by bottlenosed dolphins; the Gower, where they dived Worms Head and recorded octopus and increasingly rare skate; and in Poole Bay where multibeam sonar data was used to identify possible reef areas and did find boulders and low reefs rich in sponges and sea squirts. In Scotland new sites were dived in the Moray Firth and also at Eyemouth.

Elsewhere volunteers visited better known sites with specific aims in mind. In Lundy for example, where the visibility was unusually good at 15m, they were looking for new sites of the rare sunset cup coral, and record the condition of the population of pink sea fans which were badly damaged by disease some years ago.

While in South Devon species lists from the nearby wrecks of the *James Eagan Layne* and the *Scylla* were drawn up and the opportunity that the good weather brought was taken to visit two of the best offshore sites, Hand Deeps and the

Eddystone.

Divers were also on the lookout for pipefish and seahorses, which were a particular focus this year's recordings. Pipefish records came from as far apart as the Moray Firth, Eyemouth, Northumberland, Sussex, West Wales and Donegal, and there was a sighting of the rare short-snouted seahorse at Selsey Bill.

Many divers expressed their support for the Marine Conservation Society's 'Marine Reserves Now' campaign by adding to the photocall of sea lovers and users who believe we should be protecting our seas in an effective way by having real marine reserves.

Some of the many highlights for volunteers were dolphins and porpoises seen in Cardigan Bay and Lundy, a basking shark and seals at Lundy, a rare and beautiful sea slug in Cardigan Bay and the Selsey seahorse.

Seasearch National Coordinator Chris Wood said of the event:

"More and more divers are concerned about the state of our seas and wanting to do something about them. This weekend was a great opportunity for them to contribute to our knowledge of what is going on and we hope that they will go on learning and contributing through Seasearch activities over the rest of the summer."

For more information visit the Seasearch website at [www.seasearch.org.uk](http://www.seasearch.org.uk)

For a full report of Dive In activities that took place in Scotland see this edition's MCS article on pages 35-36

## Got Some Jumble?

IF YOU'VE got some old diving kit that is taking up too much house room, or if you are looking for a new piece of kit and don't want to pay over the odds for it then why not make your way to The Pilot House at the Harbourside in Irvine on Sunday, September 30 for the Scottish Boat Jumble.

There will be a whole range of water related used items for sale ranging from fishing tackle to dinghies and from scuba gear

to canoes. Basically, if you do it in, on or under the water there is sure to be a new or used bargain just waiting to be snapped up!

Refreshments are available all day, car parking is free and it costs just £3.50 for admission



plenty to choose from at the Scottish Boat Jumble Sale

(£15 for a marine car boot space).

For more information visit:

[www.boatjumbleassociation.co.uk](http://www.boatjumbleassociation.co.uk)  
call: 07721 888 789 or email:  
[john.boatjumble@btinternet.com](mailto:john.boatjumble@btinternet.com)



# Watch Out For Blooming Jellyfish

THE MARINE Conservation Society (MCS) is calling on British seaside visitors and sea users to take part in the national Jellyfish Survey and report any sightings of these bizarre but fascinating creatures. Large 'blooms' of jellyfish have already been reported to MCS despite the unseasonal weather, and as the UK's seas warm up, more jellyfish blooms are expected.

Peter Richardson, MCS Species Policy Officer said: "Britain's jellyfish seemed to get off to a slow start this year, but really picked up in May and June when we started to receive reports of large blooms, despite the lack of summer sunshine and blooms of the beautiful and, largely harmless, moon, blue and compass jellyfish have been reported stranded on beaches in southern England, Wales and the west coast of Scotland."

The MCS Jellyfish Survey aims to uncover the little-known habits of British jellyfish, as part of a research programme to help protect the critically endangered leatherback turtles that migrate thousands of miles to UK waters to feed on their favourite jellyfish prey each summer. By mapping where and when the jellyfish are seen, MCS hopes to understand more about leatherback turtles while they visit in UK seas.

MCS is interested in the six larger jellyfish and two jellyfish-like species likely to be encountered around the UK coast that are

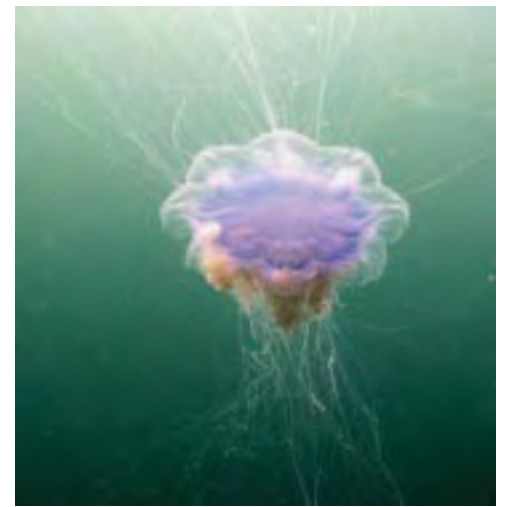
known to be leatherback prey. You are encouraged to record any jellyfish encounters at [www.mcsuk.org](http://www.mcsuk.org), where a free MCS jellyfish identification guide can also be downloaded. Paper copies of the ID guide and forms are also available on request, however MCS advises the public to take care during the survey.

"Everyone is fascinated when they come across a jellyfish on the beach, but its important to remember look but don't touch, as some species can inflict a painful sting!" said Peter Richardson.

"So long as people are careful and sensible around jellyfish, there is no reason to panic about them blooming in our seas."

Over 4,000 jellyfish encounters have been reported since the MCS Survey was launched in 2003. The survey data will be fully analysed later this year in collaboration with the University of Exeter's Centre for Ecology & Conservation, but initial analysis of these public reports is already showing interesting differences in the distribution of the six larger jellyfish species around Britain.

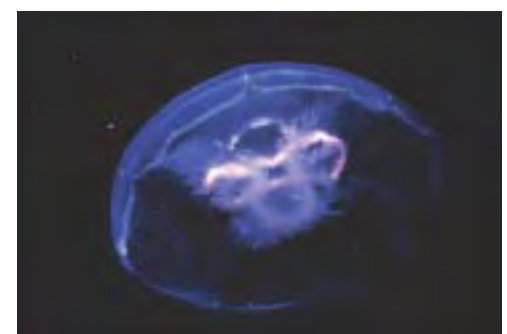
Taking part in the survey is easy – the full-colour MCS jellyfish photo-ID guide can be downloaded from [www.mcsuk.org](http://www.mcsuk.org) where jellyfish encounters can be reported online. Alternatively, if beach goers want a paper copy of the ID guide and recording forms, they are available on request from the MCS office on 01989 566017 or [info@mcsuk.org](mailto:info@mcsuk.org).



Above: *Cyanea lamarkii* - Blue Jellyfish on the beach North Uist - Peter Richardson/MCS; and in the water - Calum Duncan/MCS



Lion's Mane - Jo Baxter



Aurelia - Graham Day

## JELLYFISH YOU MIGHT SEE AROUND OUR COAST

### Barrel (harmless)

Largely restricted to the Irish Sea, Solway Firth, Firth of Clyde  
Large blooms off northwest Wales in March, with some reports through to June.

### Lion's Mane (powerful sting)

Northern seas, not usually recorded south of the Irish Sea or Northumberland.  
Some reported in May, started to bloom off west Wales in June.

### Blue (mild sting)

Entire UK coast.  
Started to bloom around the UK coast in May, continued through June.

### Compass (mild sting)

Entire UK coast, but with most records from SW England and the Irish Sea  
Unusually early blooms in South west England through June

### Moon (harmless)

Entire UK coast.  
Started to bloom in England and Wales in May, with mass blooms off east and west Scotland through June.

### Mauve stinger (powerful sting)

Occasionally reported from the Channel Islands and SW England

No UK records so far, although large blooms reported in parts of the Mediterranean.